Panel Discussion (contd); THR-0020

seven shipments that are scheduled to go out in 1 2 May, and we have about seven or eight that go out next month. 3 MR. DEE WILLIS: More questions 4 for the Panel? Comment? 5 THR-0020 MR. CATHY SNIEDER: Sure. I 6 will do a comment. Hi. I am Cathy Snieder, 7 and I just came from a small political group 8 9 here in the Gorge, and it has nothing to do with Hanford unfortunately. But I just wanted 10 to talk to the people here, the local people, 11 and let them know that out of a group of nine, 12 we raised a thousand dollars for our cause 13 tonight. 14 Now, we can all band together, and I 15 know that a lot of us are feeling really 16 17 frustrated about this whole process, because we have all been here, what, ten times, 12 times. 18 I can't even remember how many times I have 19 20 been here making comments. What I want to say to the panel is 21 have the levels of safety been lowered to accept these new shipments? Safety standards get lowered all the time. And in order to make more shipments come into Hanford, have the 25

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THR-0020 (contd); Panel Discussion (contd)

safety standards been lowered so that you guys 1 can accept these new levels, these new 3 shipments of toxic waste? MR. MICHAEL COLLINS: The 4 5 answer is no, they haven't. We already have 6 this waste at Hanford that we generated. 7 MS. CATHY SNIEDER: Right. MR. MICHAEL COLLINS: And we 8 are treating the stuff that we are getting from 9 off-site the same way. We are dealing with the 10 stuff we are getting from off-site the same way 11 we are dealing with the stuff that we deal with 12 on-site. 13 MS. CATHY SNIEDER: Okay. 14 That's even scarier. I'm sorry. 15 MR. AMBER WALDREF: Well, 16 17 there's a couple different answers to that in 18 terms of safety. One of the things I mentioned in my 19 20 presentation earlier was that levels of the carbon tetrachloride in vapors coming up from 21 the existing low-level burial grounds that have 22 radioactive waste and chemical waste are 23 already exceeding the OSHA, 176 times the OSHA 24 limit level for. 25 96

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1	<u>:</u>	
1	So workers who are putting stuff	
2	into those trenches are at risk. And that's	
3	something that we have been concerned about and	
4	bringing up to the state of Washington for	
5	several years now. So that's one concern that	
6	we have.	
7	MR. MICHAEL COLLINS: I would	
8	like to speak a little bit about that carbon	
9	tet.	
10	As I mentioned before, one of our	
11	practices that used to happen at Hanford, was	
12	they used to dump liquid low-level waste into	
13	the ground. And along with some of that	
14	low-level waste was carbon tetrachloride. So	
15	there was this known plume of carbon	
16	tetrachloride in the ground.	
17	Well, as we were monitoring this, we	
18	noticed some things that weren't tracking like	
19	we thought. So DOE, in conjunction with, not	
20	in conjunction with, but they got a sample	
21	analysis plan approved by the Department of	
22	Ecology, you know, let's look at other areas	
23	where carbon tet. might be coming from.	
24	So, what we did is we had these	
25	burial grounds, and it was transuranic waste	
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1	that potentially had carbon tet. with it.	
2	So what we did is there are these	
3	risers that go 20 feet under the ground. We	
4	send a probe down there, and sure enough, there	
5	was carbon tetrachloride in there.	
6	That's the kind of information we	
7	wanted to know in order for when we eventually	
8	exhumed this transuranic waste, sent it to	
9	WIPP, we wanted to know that information, so we	
L 0	could keep our workers safe.	
11	And right now this increased	
12	elevated level is not in any kind of breathing	
13	space, it is at the bottom of a pipe, and to	
L 4	say people were exposed to that level was just	
1.5	not true.	
16	MS. AMBER WALDREF: I never	
17	said anyone was exposed. I said that it was	
18	over the limit.	
19	And the reason why we found out this	
20	information, it wasn't that, you know, you put	
21	out a press release. We found out through the	
22	Freedom of Information Act request that we put	
23	through, and we found this information, and	
2 4	presented it.	
25	I mean, I don't know if this is the	
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1	same carbon tetrachloride plume.	
2	MR. DEE WILLIS: George	
3	Sanders.	
4	MR. GEORGE SANDERS: I will be	
5	short. I need to address this.	
6	I have a pretty clear understanding	
7	of where that investigation has gone on the	
8	carbon tetrachloride, and it is just like Mike	
9	said, he gave you good representation of that.	
10	We looked at some of the data. It told us that	
11.	we needed to look in other places.	
12	It's an ongoing investigation. We	
13	found the information. We are continuing with	
14	that investigation. We have had a lot of	
15	discussions with EPA. And it's an ongoing	
16	effort.	
17	It's not clear to us that carbon	
18	tet. came from the burial grounds. And I think	
19	that's following up on what Mike said, is we	
20	have a plume of carbon tetrachloride from the	
21	liquid discharges that is part of the past	
22	practice.	
23	We are not sure that this isn't from	
24	that, and the burial grounds are accumulating	
25	the stuff, or if indeed we may have some	
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1	contaminants in there. We will find out and
2	take the appropriate actions.
3	MR. DEE WILLIS: Panel?
4	MS. LYNN MYSTICE HEALER: Yeah.
5	My name is Lynn Mystice Healer, and I just
6	wanted to know, it's been 14 years that this
7	has been going on, this cleanup. This leaking,
8	cleanup, leaking, and it's still leaking.
9	Okay. 14 years.
10	I want to know how much money was
11	spent. And I also want to really make sure
12	that everyone sees this picture. Let's see,
13	how much money has been spent in this leaking
14	cleanup.
15	Okay. Now, this is modern, and how
16	many billions were spent to do this? I want to
17	know how much this cost. I want to know how
18	much it cost. Can you tell me?
19	MR. MICHAEL COLLINS: I don't
20	know how much has been spent in the past 14
21	years, but I am trying to see this. This looks
22	like transuranic waste that was already in the
23	ground and it's being dug out.
24	MS. AMBER WALDREF: No. They
25	are current trenches.
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1	MR. MICHAEL COLLINS: They are
2	current trenches all right.
3	MR. DEE WILLIS: It is 218 W.
4	MR. MICHAEL COLLINS: W what?
5	MR. DEE WILLIS: Just a
6	minute. 4 C.
7	MR. MICHAEL COLLINS: 4 C.
8	MS. LYNN MYSTICE HEALER: The
9	leaking waste, the leaking waste that's still
10	leaking. 14 years ago I heard about leaking
11	waste into the groundwater. 14 years ago.
12	How much money in 14 years has been
13	spent on Hanford cleanup to get still leaking
14	waste? 14 years. How much money?
15	MR. GREG deBRULER: They have
16	basically spent about 20 billion dollars
17	cleaning up Hanford. Okay? That's everything
18	on the site.
19	But as far as, there's two issues
20	here. There's tank waste leaking into the
21	ground, and they've supposedly stopped the tank
22	leaks from leaking into the ground. Okay?
23	There's that part.
24	And then there's this carbon tet.
25	issue, and the issue is, well, if you have
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1	waste that has liquids in it, this low-level	
2	waste, it shouldn't be leaking into the ground,	
3	and maybe they have a problem. They don't	
4	know. They are still investigating that.	
5	MS. AMBER WALDREF: Well,	
6	earlier I also stated that, in one of my	
7	slides, that the groundwater monitoring wells,	
8	many of them are dry, and there's not enough to	
9	be monitoring all the waste currently.	
10	So, whether or not some of these	
11	low-level burial grounds are leaking or not, we	
12	need to do some more monitoring to find that	
13	out.	
14	MR. MICHAEL COLLINS: I would	
15	agree, we do need to do more monitoring.	
16	We have a schedule that we have made	
17	up with the state and EPA for a hundred or so	
18	more wells in the next five years or something	
19	like that.	
20	And I just want to say one of the	
21	reasons that the wells are going dry is a	
22	testament to the practices that we stopped of	
23	this liquid low-level waste disposal. We	
24	stopped that. The wells went dry. And now we	
25	are reacting to that.	
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1	So, I mean, the fact that the wells
2	went dry is an indication of a good thing
3	happening.
4	MR. NICHOLAS CETO: Yeah. I
5	just want to add to that.
6	Last night I decided I wasn't going
7	to sit up on the panel because I didn't want to
8	be in a position of defending DOE, and then I
9	kind of thought about it, and I thought, well,
10	it is important that people do know what's gone
11	on, because there are a lot of accusations and
12	a lot of information that is sort of right but
13	not completely right.
14	I think part of my responsibility is
15	just to make sure you guys get a little bit
16	more balanced story.
17	You are right, there are still leaks
18	going on at the site. But there are tremendous
19	amount of work that has been done to stop the
20 .	leaks that there are, to try to stop the
21	recharge of the aquifer.
22	For example, no more liquid waste
2.3	disposal happens on the site anymore. A lot of
24	the places where liquid wastes are dumped,
25	almost all of them now, the historic places,
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1	like the trenches along the river, have been	
2	excavated and they are going after the	
3	contaminants that are there. There are pump	
4	and treat systems that are there in place	
5	trying to intercept it. There is one for	
6	strontium 90. There is one for carbon	
7	tetrachloride. Also for chromium. So that's	
8	ongoing.	
9	There's also been an intensive	
10	effort to top the recharge of the groundwater	
11	into the system.	
12	It's a very arid climate. So when	
13	you stop the recharge of groundwater through	
14	leaking wells, through waste disposal	
15	practices, the contaminants don't move as much,	
16	like that sponge I talked about before.	
17	So a lot of work has been done to	
18	stop the leaks. They are not stopped. The	
19	tanks certainly are still leaking episodically.	
20	There's the K Basin lagoons along the river,	
21	the tanks along the river, and the concrete	
22	basins which we still believe are leaking.	
23	We just penalized Energy \$76,000 for	
2 4	being behind schedule on that.	
25	So, we are trying to make sure they	
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1	get the work done. They are doing their best
2	to do it. So a lot of good things are
3	happening. There are still problems out there,
4	and that is why we are still investigating.
5	So all of us here, sitting up here,
6	including the state of Washington, you know,
7	owe it to you guys to get this changed, and we
8	are trying to get at it.
9	Don't think people aren't taking it
10	seriously. Are they doing it perfectly?
11	Absolutely not. I think people are trying to
12	improve how they do it every day, though.
13	MR. GEORGE SANDERS: Well,
14	Nick's comments, I would agree with all of
15	those.
16	I do want to characterize one thing
17	for you, though. I don't think EPA is the only
18	one up here that is capable of giving you all a
19	straight answer. And so I want to kind of take
20	a little umbrage with that. I will try to give
21	you straight answers.
22	MR. NICHOLAS CETO: George, I
23	was mostly talking about the information from
24	around the room, not from you. I didn't intend
25	for you to take it personally.
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1 MR. GEORGE SANDERS: Absolutely not. I think, though, Nick did characterize 2 this right. You are correct about the 3 4 leakages. But he also said it was from these 5 past liquid discharges. Hundreds -- I mean, 6 just billions of gallons of those liquid 7 discharges have ceased now, the tanks that 8 leaked. 9 I have to tell you, I have become a 10 student of the old history, and we have some of 11 the old history from the old people, the '40s 12 and '50s guys. They took a lot of pain and 13 agony to keep free liquids out of the solid 14 burial grounds, of the solid waste burial 15 16 grounds. And to this date, and correct me, 17 Mike, and Nick, if you have heard anything 18 differently, we have no indications that we 19 have had leakages from the solid waste burial 20 grounds. Okay? 21 22 We know where the other leaks have come from. The majority of the contaminants in 23 the vadose zone are from these liquid 24 discharges, and we have a big job ahead of us 25 106

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1	to try to deal with those.	
2	Having said all of that, we still	
3	have to make sure that there's no waste put in	
4	the ground that has liquids in it, and we have	
5	to take the proper precautions.	
6	We are talking about building a	
7	lined facility, which will help us with that.	
8	Because a lined facility will help you during	
9	the period the waste is open and exposed,	
10	collects groundwater I mean, rain water for	
11	you. So you can keep the recharge down.	
12	So, there's a lot we are trying to	
13	do, and we just have to get on top of it.	
14	MR. DEE WILLIS: Panel, any	
15	more?	
16	Okay. I'm going to go to this	
17	gentleman and then you two over here.	
18	MR. JOE KATROSICK: My name is	
19	Joe Katrosick. The Fast Flux reactor was shut	
20	down a few weeks ago, a month ago.	
21	Are there any plans, or are there	
22	any other reactors on line at Hanford, or is it	
23	strictly a total cleanup process there, or do	
24	they have what are the plans for politically	
25	speaking for the future for the whole nuclear	
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1	industry, or what would you call it, the
2	military industry of the nuclear age?
3	MR. MICHAEL COLLINS: I can
4	speak for probably Hanford and say there are no
5	plans for any new reactors there. I will say,
6	all the DOE reactors are now shut down. There
7	is a WNP 1, which is a power producing
8	reactor 2, sorry, is still running and
9	producing power.
10	MR. GEORGE SANDERS: But
11	that's not a DOE.
12	MR. MICHAEL COLLINS: Correct.
13	That is not DOE.
14	MR. DAN LICHTENWALD: My name
15	is Dan Lichtenwald. I live in Goldendale,
16	Washington.
17	On the contaminants getting into the
18	river, there's really a lot of dancing around
19	on that.
20	Is there a daily or weekly or
21	monthly ongoing report on what is showing up,
22	and where does that appear? Or is monitoring
23	going on constantly?
24	MR. MICHAEL COLLINS: Ground-
25	water monitoring goes on constantly.
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1	MR. DAN LICHTENWALD: As far as
2	what's getting into the river. Getting into
3	the river, that's the big You know, what's
4	getting into the river?
5	MR. MICHAEL COLLINS: I don't
6	know if that's a single report that gives like
7	an annual update, is there?
8	MR. THOMAS STOOPS: You can get
9	that out of the annual groundwater monitoring
10	report.
11	MR. GEORGE SANDERS: Yeah.
12	MR. DAN LICHTENWALD: Now,
13	that's groundwater.
14	MR. TOM STOOPS: The sampling
15	data from all the ports, and the ports were
16	installed in the bottom of the river, that has
17	that data in it, it also has the monitoring
18	well data from the treatment systems that sit
19	adjacent to the river.
20	MR. DAN LICHTENWALD: Okay.
21	Are the agency and NGO people, do they get that
22	stuff, state and
23	MR. THOMAS STOOPS: Yes.
24	MR. DAN LICHTENWALD: I am
25	calling them NGO. Advocacy groups. Are they
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1	getting it?	
2	MR. MICHAEL COLLINS: I don't	
3	know if it is automatically distributed to	
4	them. Although they are welcome to have copies	
5	of it.	
6	MR. THOMAS STOOPS: It is	
7	available on line.	
8	MR. DAN LICHTENWALD: It is?	
9	So, I guess what I am getting at, I will have	
10	to ask this question to the officials, is there	
11	a policy to suppress information about levels	
12	and types of contamination going into the	
13	river?	
14	MR. MICHAEL COLLINS: No.	
15	MR. GEORGE SANDERS: Not that	
16	I am aware of.	
17	MR. DAN LICHTENWALD: Not that	
18	you are aware of. All right. Thank you.	
19	MR. GREG deBRULER: I want to	
20	comment on this.	
21	Every year there's an annual report	
22	that's been produced by Pacific Northwest	
23	National Labs. It's the groundwater report.	
24	And about five years ago PNNL got bashed around	
25	by public interest organizations and some of	
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1	the Tribes and stuff because the report was	
2	kind of like apple pie and ice cream.	
. 3	And the report got a little better,	
4	but does it really give you the information	
5	that you need to have to assess the livability	
6	of the ecosystem?	
7	No. It gives you some numbers. It	
8	gives you mean annual averages. It doesn't	
9	really tell you what the peaks are.	
10	If you look at the lack of extensive	
11	monitoring that really would be, should be	
12	required, it's not there.	
13	So, when you hear tonight that they	
14	are now in agreement, they are going to put in	
15	100 wells in the next five years, if you look	
16	at the noncompliance that started in 1999, the	
17	Department of Energy was supposed to put in up	
18	to 50 wells a year, and it's now 2003, and they	
19	now have an agreement that they are going to	
20	put up to 50 wells in, what was the number	
21	again? 100 wells in the next five yeas.	
22	So there's a lot of work that could	
23	be done.	
24	And then just to carry that a little	
25	further, when you think of them trying to	
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1	release the river corridor as being clean in	
2	the year 2012, this is the Department of	
3	Energy's goal, which is I think, forget it, you	
4	couldn't even get to there, but let's say they	
5	try that, the amount of extensive monitoring	
6	that should be required is going to be a real	
7	battle, because if you look at the Department	
8	of Energy and what they call their long-term	
9	stewardship, it's a bunch of words. They	
10	really haven't allocated the resources and	
11	really looked comprehensively of how to set	
12	this thing up. So, you know, we are still kind	
13	of grappling in the dark, I think.	
14	MR. DEE WILLIS: Panel?	
15	MR. NICHOLAS CETO: In addition	
16	to the groundwater monitoring report, there's	
17	also a site-wide monitoring report that comes	
18	out every year, too.	
19	So we get a pretty good look at	
20	what's going on. We don't, EPA doesn't collect	
21	a lot of that data. It's done by contractors	
22	for DOE.	
23	But this year EPA is going to be	
24	going out in the field, actually in the next	
25	couple of months, to collect some of our own	
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Panel Discussion (contd); THR-0021

data, just part of our process, and then we are hoping it is going to feed us a ecological risk assessment which we are going to do for the river corridor, and we hope to get a lot of Hanford stakeholders involved in helping us scope that out.

THR-0021 MR. GREG deBRULER: Actually I have one other thought that I needed to throw in.

You heard that they are going to be doing a potential river corridor assessment to

doing a potential river corridor assessment to look at the complete 51 miles of the Columbia River, the Hanford Reach, to look, do a risk assessment for that.

And do you know what I find that is just totally amazing, is that they refer in their risk assessment to assume that the river is ever going to change over time. They refuse to assume that the dams are going to come out and there could be catastrophic flooding.

So, when you think of the waste that they are digging down 15 feet and cleaning up the first part of the contamination, the next 20 feet that's still highly contaminated is going to be affected if there is catastrophic

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THR-0021 (contd)

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	1	flooding or if the river changes in elevation	
	2	constantly, because let's say they want to save	
1	3	a lot of salmon and they increase the flow.	
	4	But in their modeling they refuse to	
	5	assess that.	
	6	And the other thing that they refuse	
	7	to access is the combined effects of other	
	8	plumes migrating into other plumes.	
	9	For example, at the Strontium 90	
	10	plume at Hanford, which is at N-Area, which	
	11	Strontium 90, if you are deficient in calcium,	
2	12	your body absorbs it like calcium, so think of	
	13	fish.	
	14	This is an extremely contaminated	
	15	site. There is a sodium plume that is right	
	16	beside it.	
	17	Back in the old days, like '94, '93,	
	18	they talked about the sodium plume eventually	
	19	migrating into the strontium 90 plume, which	
	20	would then dissorb it, make the strontium 90	
	21	release and go into the river. They refuse to	
	22	model that.	
	23	So, going back to the question, is	
	24	there a conspiracy or a directive? No. But	
	25	there is a conflict	
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THR-0021 (contd) Panel Discussion (contd)

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	1 .	MR. DAN LICHTENWALD: Policy.	
	2	MR. GREG deBRULER: Policy.	
	3	There is the word.	
1	4	But there is a conflict of interest.	
	5	And this was addressed by Secretary O'Leary	
3	6	originally when we bought it up, because the	
	7	Pacific Northwest National Lab is a polluter.	
	8	They are also the ones that do most of the risk	
	9	assessment work at Hanford.	
	10	And we have tried forever to break	
	11	that cycle. That's why we required a Columbia	
	12	River Comprehensive Impact Assessment that was	
	13	done by an independent team not beholding to	
	14	DOE, and we have been fought every tooth and	
	15	step of the way. And so we still have the	
	16	problem.	
	17	MR. DEE WILLIS: Nick?	
	18	MR. NICHOLAS CETO: Yeah. I	
	19	think this is why I decided to sit up here.	
	20	You know, I appreciate Greg's trying	
	21	to get you folks involved in this, and I think	
	22	it's a great thing for public involvement.	
	23	But I think I just seconds before he	
	24	took the microphone said we were going to get	
	25	everyone involved in scoping this out. So I	
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think it's really inappropriate for Greg to 1 2 guess what we are going to do before we even talk to anybody about what we are going to do. 3 So, it's not really fair to say 4 that. So you just need to understand that when 5 we say we are going to scope it and talk about 6 7 it, that's what we are going to do, and it is going to get you folks involved, and it may 8 9 well be that that is something that is looked at. I can't say that it will or won't be. 10 But I don't think it is fair to 11 assume that it won't. 12 MR. GREG deBRULER: I need to 13 finish this. This is, you know, this is 14 15 point/counterpoint, here we are, welcome to 16 America. 17 Four months ago I wrote a letter to 18 the Department of Energy, asking the Department of Energy and the Tri-Party agencies, along 19 with Fish and Wildlife, to stop the work on the 20 21 ecological risk assessment of the N-Area, and the reason why I asked them to do that is 22

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because four years ago, three years ago, Dennis

Faulk, four years ago Dennis Faulk and I

talked, in 1999, about doing a comprehensive